

Monitoring Data RecordProject Title: R-2210A Site 1 (Waynesville Site 1) COE Action ID: 200130653Stream Name: Raccoon Creek DWQ Number: 010409City, County and other Location Information: Sta. 30 on Bus. 23 S in Waynesville, Haywood Co.Date Construction Completed: July 2003 (lower portion), 2005 (upper portion)

Monitoring Year: (5) of 5

Ecoregion: _____ 8 digit HUC unit 06010106

USGS Quad Name and Coordinates: _____

Rosen Classification: _____Length of Project: 1225' Urban or Rural: Rural Watershed Size: _____Monitoring DATA collected by: M. Green and J. Young Date: 8/13/08

Applicant Information:

Name: NCDOT Roadside Environmental UnitAddress: 1425 Rock Quarry Rd. Raleigh, NC 27610Telephone Number: (919) 861-3772 Email address: mlgreen@dot.state.nc.us

Consultant Information:

Name: _____

Address: _____

Telephone Number: _____ Email address: _____

Project Status: Complete**Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.):** Level 1 2 3Monitoring Level 1 requires completion of *Section 1, Section 2 and Section 3*

Permit States: NCDOT shall perform the following components of Level I monitoring twice each year for the 5 year monitoring period (summer and winter): Reference photos, plant survival, and visual inspection of channel stability. If less than two bankfull events occur during the first 5 years, NCDOT shall continue monitoring until the second bankfull event is documented. The bankfull events must occur during separate monitoring years. In the event that the required bankfull events do not occur during the 5 year monitoring period, the USACE, in consultation with resource agencies, may determine that further monitoring is not required.

Section 1. PHOTO REFERENCE SITES*(Monitoring at all levels must complete this section)*

Attach site map showing the location and angle of all reference photos with a site designation (name, number, letter, etc.) assigned to each reference photo location. Photos should be provided for all structures and cross section locations, should show both banks and include an upstream and downstream view. Photos taken to document physical stability should be taken in winter. Photos taken to document vegetation should be taken in summer (at representative locations). Attach photos and a description of each reference photo or location. We recommend the use of a photo identification board in each photo to identify location.

Total number of reference photo locations at this site: 6 reference points, 2 photos at each**Dates reference photos have been taken at this site:** 5/20/04, 11/1/04, 5/31/05, 3/21/06, 10/18/06, 2/28/07, 9/12/07, 2/12/08, 8/13/08**Individual from whom additional photos can be obtained (name, address, phone):** _____Other Information relative to site photo reference: A site map with photo point locations is included with this report.If required to complete Level 3 monitoring only stop here; otherwise, complete section 2.

Section 2. PLANT SURVIVAL

Attach plan sheet indicating reference photos.

Identify specific problem areas (missing, stressed, damaged or dead plantings):

Estimated causes, and proposed/required remedial action:_____

ADDITIONAL COMMENTS: Stream is highly vegetated with alder, tulip poplar, white oak, river birch, white pine, elderberry, silky dogwood, sycamore, black willow, red maple, willow oak, buttonbush, arrowwood, and thick herbaceous vegetation. Some of the herbaceous vegetation noted was goldenrod, jewelweed, sedge, *Juncus* sp., tearthumb, and various herbaceous vegetation.

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

Section 3. CHANNEL STABILITY

Visual Inspection: The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

Raccoon Creek is stabilized for the Year 5 Summer Evaluation but as noted in previous reports, the stream is experiencing some bank erosion in several bends on the outside bank and some minor bank erosion behind some of the rootwads. However, this is not affecting the overall stability of the stream at this time. These areas are highly stabilized with herbaceous and woody vegetation. No remedial action is necessary and NCDOT will continue to monitor the stream.

Date Inspected	Station Number	Station Number	Station Number	Station Number	Station Number
Structure Type					
Is water piping through or around structure?					
Head cut or down cut present?					
Bank or scour erosion present?					
Other problems noted?					

NOTE: Attach separate narrative sheets to each monitoring report describing/discussing the overall monitoring results. Include the identification of specific problem areas/channel failures, estimated cause and proposed/required remedial action. This should include a brief discussion of any parameter that has changed significantly from as-built.

Waynesville Site 1



Photo 1(Upstream)



Photo 2 (Downstream)



Photo 3 (Upstream)



Photo 4 (Downstream)



Photo 5 (Upstream)



Photo 6 (Downstream)

Year 5 Summer – August 2008

Waynesville Site 1



Photo 7 (Upstream)



Photo 8 (Downstream)



Photo 9 (Upstream)



Photo 10 (Downstream)



Photo 11 (Upstream)



Photo 12 (Downstream)

Year 5 Summer – August 2008

R-2210A UT to Raccoon Creek (Site 1) Photo Point Locations

Photo Locations

